## We claim:

- 1. A process for the preparation of EPCRS form of 3-[2-[4-(6-Fluoro-1, 2-benzisoxazol-3-yl)-1-piperidinyl] ethyl]-6,7,8,9-tetrahydro-2-methyl-4H-pyrido [1,2-a] pyrimidin-4-one (Risperidone), which comprises:
  - a) dissolving the Risperidone in an organic solvent(s) such as methyl propyl ketone, anisole, dioxane, methyl cellosolve, xylene, 1- pentanol, mixture of alcohols such as methanol or ethanol with solvents as acetone, methyl isobutyl ketone, methyl cellosolve, heptane, di-isopropyl ether, cyclohexane, isooctane, anisole, mixture of toluene with solvents such as acetone, iso octane, heptane, diisopropyl ether, mixture of xylene with solvents such as n-hexane, heptane, isooctane, t-butyl ether, mixture of methyl isobutyl ketone and methyl cellosolve, mixture of dichloromethane and iso octane, Mixture of methanol and water, Aqueous ethanol, mixture of chloroform and cyclohexane etc or a combination of above described solvents at hot condition or at reflux
  - b) optionally treating the dissolved solution with carbon
  - c) filtering the reaction solution to get particle free solution
  - d) cooling the reaction solution to get precipitation / optionally adding the anti solvents such as n-hexane, n-heptane, isooctane, cyclohexane etc. for the separation of Risperidone from reaction solution.
  - e) isolating the desired EPCRS form of Risperidone by conventional methods.
- 2. The process as claimed in claim 1 of step (a), dissolving the Risperidone in an organic solvent selected from methyl propyl ketone, anisole, dioxane, methyl cellosolve, methyl cellosolve, xylene and 1- pentanol.
- 3. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of alcohols such as methanol or ethanol with solvents like

- acetone, methyl isobutyl ketone, methyl cellosolve, n-heptane, di-isopropyl ether, cyclohexane, isooctane and anisole.
- 4. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of toluene or Xylene with solvents such as acetone, heptane, diisopropyl ether, n-hexane, , isooctane and t-butyl ether.
- 5. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of methyl isobutyl ketone and methyl cellosolve
- 6. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of dichloromethane and isooctane
- 7. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent mixture of methanol and water.
- 8. The process as claimed in claim 1 of step (a), dissolving the Risperidone in Aqueous ethanol.
- 9. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a mixture of chloroform and cyclohexane.
- 10. The process as claimed in claim 1 of step (a), dissolving the Risperidone in an Aqueous ethanol ranging 1% to 30%(water content in ethanol).
- 11. The process as claimed in claim 1 of step (a), dissolving the Risperidone in a solvent or solvents at hot condition ranging from 40°C to reflux temperature.
- 12. The process as claimed in claim 1 of step (a), where in dissolving the Risperidone in a solvent or solvents mixture selected from any of the mentioned solvents in step(a) of claim 1.
- 13. The crystalline EPCRS form of Risperidone obtained in the process of claim 1 has X-ray powder diffraction pattern with peaks at  $7.14 \pm 0.2$ ,  $10.79 \pm 0.2$ ,  $11.58 \pm 0.2$ ,  $13.84 \pm 0.2$ ,  $14.35 \pm 0.2$ ,  $14.96 \pm 0.2$ ,  $15.62 \pm 0.2$ ,  $16.57 \pm 0.2$ ,  $18.63 \pm 0.2$ ,

 $19.07 \pm 0.2$ ,  $19.93 \pm 0.2$ ,  $21.43 \pm 0.2$ ,  $22.32 \pm 0.2$ ,  $22.61 \pm 0.2$ ,  $23.31 \pm 0.2$ ,  $23.62 \pm 0.2$ ,  $24.50 \pm 0.2$ ,  $25.43 \pm 0.2$ ,  $27.67 \pm 0.2$ ,  $28.53 \pm 0.2$ ,  $29.16 \pm 0.2$ ,  $32.57 \pm 0.2$ ,  $33.15 \pm 0.2$  and  $38.72 \pm 0.2$  degrees two theta.